

Amendments to the Claims

This listing of the claims will replace all prior versions and listings of claims in the present application.

Listing of Claims

Claims 1-9 (Cancelled)

10. (New) A system for supporting a plurality of graphical user interface (GUI) application programming interfaces (APIs), the system comprising:

a model content provider in communication with a query model, the query model comprising a plurality of elements that represents a database statement, wherein the model content provider translates the plurality of elements into objects that are independent of any type of data structure;

a first content viewer in communication with the model content provider, the first content viewer supporting multiple GUI APIs, wherein the translated objects are passed from the model content provider to the first content viewer; and

a second content viewer in communication with the first content viewer and an application implementing a specific GUI API, the second content viewer being designed for the specific GUI API, wherein the translated objects are passed from the first content viewer to the second content viewer and the second content viewer manipulates the translated objects into one or more types of data structures that are usable by the application.

11. (New) The system of claim 10, wherein the one or more types of data structures comprise tables, trees, or lists.
12. (New) The system of claim 10, wherein the database statement is a structured query language (SQL) statement.
13. (New) The system of claim 10, wherein the model content provider
receives information from the application via the first and second content viewers, the
received information being independent of any type of data structure, and
creates one or more additional elements based on the received information responsive to
the received information being an addition to the plurality of elements in the query model.
14. (New) The system of claim 10, wherein the model content provider
receives information from the application via the first and second content viewers, the
received information being independent of any type of data structure, and
removes one or more of the plurality of elements from the query model responsive to the
received information being a deletion of the one or more elements in the query model.
15. (New) The system of claim 10, wherein the model content provider provides both data
and image information for each of the plurality of elements in the query model to the first
content viewer.

16. (New) A method for supporting a plurality of graphical user interface (GUI) application programming interfaces (APIs), the method comprising:

translating a plurality of elements of a query model into objects that are independent of any type of data structure using a model content provider in communication with the query model, the plurality of elements representing a database statement;

passing the translated objects from the model content provider to a first content viewer in communication with the model content provider, the first content viewer supporting multiple GUI APIs;

passing the translated objects from the first content viewer to a second content viewer in communication with the first content viewer and an application implementing a specific GUI API, the second content viewer being designed for the specific GUI API; and

manipulating the translated objects into one or more types of data structures that are usable by the application using the second content viewer.

17. (New) The method of claim 16, wherein the one or more types of data structures comprise tables, trees, or lists.

18. (New) The method of claim 16, wherein the database statement is a structured query language (SQL) statement.

19. (New) The method of claim 16, further comprising:

receiving information from the application via the first and second content viewers at the model content provider, the received information being independent of any type of data structure; and

creating one or more additional elements using the model content provider based on the received information responsive to the received information being an addition to the plurality of elements in the query model.

20. (New) The method of claim 16, further comprising:

receiving information from the application via the first and second content viewers at the model content provider, the received information being independent of any type of data structure; and

removing one or more of the plurality of elements from the query model using the model content provider responsive to the received information being a deletion of the one or more elements in the query model.

21. (New) The method of claim 16, further comprising:

providing both data and image information for each of the plurality of elements in the query model to the first content viewer using the model content provider.

22. (New) A computer-readable medium encoded with a computer program for supporting a plurality of graphical user interface (GUI) application programming interfaces (APIs), the computer program comprising computer-executable instructions for:

translating a plurality of elements of a query model into objects that are independent of any type of data structure using a model content provider in communication with the query model, the plurality of elements representing a database statement;

passing the translated objects from the model content provider to a first content viewer in communication with the model content provider, the first content viewer supporting multiple GUI APIs;

passing the translated objects from the first content viewer to a second content viewer in communication with the first content viewer and an application implementing a specific GUI API, the second content viewer being designed for the specific GUI API; and

manipulating the translated objects into one or more types of data structures that are usable by the application using the second content viewer.

23. (New) The computer-readable medium of claim 22, wherein the one or more types of data structures comprise tables, trees, or lists.

24. (New) The computer-readable medium of claim 22, wherein the database statement is a structured query language (SQL) statement.

25. (New) The computer-readable medium of claim 22, wherein the computer program further comprises computer-executable instructions for:

receiving information from the application via the first and second content viewers at the model content provider, the received information being independent of any type of data structure; and

creating one or more additional elements using the model content provider based on the received information responsive to the received information being an addition to the plurality of elements in the query model.

26. (New) The computer-readable medium of claim 22, wherein the computer program further comprises computer-executable instructions for:

receiving information from the application via the first and second content viewers at the model content provider, the received information being independent of any type of data structure; and

removing one or more of the plurality of elements from the query model using the model content provider responsive to the received information being a deletion of the one or more elements in the query model.

27. (New) The computer-readable medium of claim 22, wherein the computer program further comprises computer-executable instructions for:

providing both data and image information for each of the plurality of elements in the query model to the first content viewer using the model content provider.